GROUNDWATER MONITORING WORK PLAN 2004
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

by

Haley & Aldrich, Inc.
San Diego, California

for

Boeing Realty Corporation
Long Beach, California

File No. 28882-602
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HALEY & ALDRICH

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2004

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
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Prepared for

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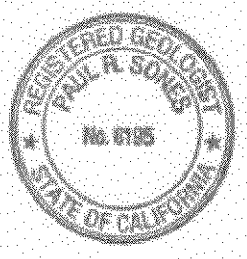

HALEY & ALDRICH

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1. INTRODUCTION

This work plan has been prepared for continuing groundwater monitoring at the Boeing Realty Corporation's (BRC) Former C-6 Facility (Site) in Los Angeles, California (Figure 1). A total of 41 groundwater monitoring events have been performed since 1987. Three monitoring events are planned for 2004, including:

- A Site-wide annual event in March;
- A quarterly sampling event in June of 2004 of 11new monitoring wells to be installed by December of 2003; and
- A source-area specific, semi-annual monitoring event in September.

This work plan identifies the groundwater monitoring wells that will be sampled and chemicals that will be analyzed during each event. This sampling program is in addition to the groundwater monitoring program being performed under the general Waste Discharge Requirements (WDRs), Order No. R4-2002-0030: Series 007 for the Building 2 groundwater bioremediation program. The following sections of this work plan present a Site background, the proposed groundwater monitoring program, and reporting.

1.1 Background

1.1.1 Site Geology

The Site is located on the Torrance Plain physiographic area of the West Coast Basin. Groundwater monitoring wells and soil borings drilled at the Site have encountered the Lakewood Formation, consisting of two major Hydrostratigraphic Units: the Bellflower Aquitard and the Gage Aquifer. Groundwater monitoring wells at the Site have only been installed within the Bellflower Aquitard, which extends to a depth of approximately 140 feet below ground surface (bgs). The top 20 to 50 feet of the Bellflower Aquitard below the Site consists of fine-grained soils (predominantly fine sands, silts, and clays) which thicken to the east. A sandy zone that dips downward to the east underlies the fine-grained soils. The sandy zone is generally 80 to 100 feet thick and contains discontinuous layers of fine-grained sediment that also dip downward to the east. Although the fine-grained layers within the sandy unit are discontinuous, there are two separate fine-grained layers that are relatively continuous. Beneath some areas of the Site, the discontinuous fine-grained units overlap. The sandy unit is underlain by another fine-grained zone at approximately 110 to 140 feet bgs.

1.1.2 Site Hydrogeology

Groundwater conditions at the Site are reasonably understood from previous investigations and groundwater monitoring events (Kennedy/Jenks Consultants, 2000a, and England Geosystem/Haley & Aldrich, Inc., 2001, and Haley & Aldrich 2002a). Groundwater at the Site is located in sediments of the Bellflower Aquitard, which has two sub-units, the Middle Bellflower Aquitard and the Lower Bellflower Aquitard. The uppermost groundwater appears to be under water table conditions, at depths of 60 to 70 feet bgs. Most of the Site groundwater monitoring wells are screened near the water table at depths ranging from 55 to 90 feet bgs. Two deeper wells, WCC-1D and WCC-3D, were screened in a deeper zone at approximately 115 to 140 feet bgs, and have since been abandoned. As part of the Site-Wide Groundwater Monitoring Work Plan (Haley & Aldrich, 2003a), approved by the Los Angeles Regional Water Quality Control Board (LARWQCB) on 28 May 2003, 11 new monitoring wells will be installed at the Site by the end of November 2003. Six of these wells will be screened in the deeper zone, at approximately 100 to 125-feet bgs. In addition, an in-situ Reactive Zone (IRZ) bioremediation system was installed at the Site in September 2003. This IRZ system consists of 149 IRZ injection wells and eight IRZ monitoring wells (Arcadis G&M, 2002a and 2002b). Injection of carbohydrate amendments will commence in November 2003 under the provisions of a LARWQCB general WDR. Groundwater monitoring for this WDR-permitted remediation program is being performed separately from this work plan.

Groundwater flow at the Site is predominately to the south, under a gradient of approximately 0.001 feet/feet. The Site-specific water-bearing units of the Middle Bellflower Aquitard (MBA) and the Lower Bellflower Aquitard (LBF) (Poland and others, 1959 and Department of Water Resources [DWR], 1961) are described below.

The Middle Bellflower Aquitard is a massive, light yellowish brown, fine to medium sand with local muddy zones. An extensive mud layer referred to as the Middle Bellflower mud (MBFM), locally interrupts this sand. Where divided, the top sand subunits are referred to as the B-Sand (MBFB); the bottom sand subunits as the C-Sand (MBFC).

The B-Sand is found at an approximate depth of 60 to 72 feet bgs at the Site, and is generally from 25 to 40 feet thick. The B-Sand predominantly consists of interbedded fine sands and silts. Groundwater flow within the B-Sand is predominantly to the south.

The uppermost groundwater at the Site occurs within the B-Sand at depths of 60 to 70 feet bgs. Most of the groundwater monitoring wells at the Site are completed within the B-Sand. Table 1 includes groundwater monitoring well completion information.

The MBFM is discontinuous in the Site area, and comprised of laminated silts, layered silts, and very fine sands. Thickness of the MBFM ranges from approximately 3 to 13 feet.

The C-Sand is found at an approximate depth of 97 to 107 feet bgs at the Site, and extends to a depth of up to approximately 125 feet bgs. The C-Sand predominantly consists of interbedded medium-to-fine sands. Groundwater flow within the C-Sand is reported to be to the southeast (Kennedy Jenks Consultants, 2000b). Six groundwater monitoring wells are to be completed within the C-Sand at the Site between August and December, 2003. In addition, three of the eight IRZ bioremediation monitoring wells will be completed in the C-Sand unit.

The fine-grained Lower Bellflower Aquitard (LBF) appears to be continuous across the area. It occurs at an approximate depth of 114 to 150 feet bgs and ranges in thickness from 10 to 25 feet. The LBF separates the Bellflower sands from the underlying Gage Aquifer. The Gage Aquifer in the Site vicinity is predominantly sand and ranges in thickness from 40 to 78 feet thick. No groundwater monitoring wells are screened in the LBF or Gage Aquifer at the Site.

1.2 Historical Groundwater Monitoring Events

Groundwater information at the Site (Figure 2) comes from four primary sources:

- Groundwater monitoring wells installed at the Site by BRC and its predecessors (prefixes include WCC, TMW, MWB and MWC);
- Groundwater monitoring wells installed on the Site by International Light Metals (ILM) for investigations at ILM (prefixes DAC and BL);
- Groundwater monitoring wells installed on the Site by Montrose Chemical Corporation (Montrose) for investigations at Montrose (prefix XMW); and
- Bioremediation groundwater monitoring wells installed on the Site by BRC (prefixes IRZ, shown in Figure 2).

Groundwater investigations began in early 1987 with the installation of groundwater monitoring well WCC-1S. A total of 43 groundwater monitoring wells have since been installed at the Site. Twenty-one of these groundwater monitoring wells have been abandoned as a result of redevelopment activities. Two of these 21 wells (TMW-5 and TMW-16) were abandoned during 2003.

On 31 March 2003, a Site-Wide Groundwater Monitoring Work Plan was submitted to the LARWQCB outlining the long-range groundwater monitoring needs for the Site (Haley & Aldrich, 2003a). This work plan proposed the installation of seven B-Sand and seven C-Sand

monitoring wells as re-development access allowed. The LARWQCB approved this work plan on 28 May 2003. Eleven of these proposed new groundwater monitoring will be installed at the Site by the end of 2003. Five of the new wells will be installed in the B-Sand unit (MWB005, MWB012, MWB013, MWB014, and MWB019); six in the C-Sand unit (i.e., MWC001, MWC015, MWC016, MWC017, MWC021, and MWC026) (Figure 2). Groundwater monitoring wells known or assumed to currently exist on the Site are shown on Figure 2. There are a total of 22 existing, and 11 proposed groundwater monitoring wells to be installed at the Site by the end of 2003. Actual and proposed completion details for the 33 groundwater monitoring wells to be sampled in 2004 are included in Table 1.

In addition to the 22 existing, and 11 proposed groundwater monitoring wells at the Site, 8 IRZ bioremediation groundwater monitoring were installed at the Site in 2003 to monitor the effectiveness of the IRZ bioremediation program. Five of the IRZ groundwater monitoring wells were completed in the B-Sand unit, and three wells are completed in the C-Sand unit (Arcadis G&M, 2002a and 2002b). One of the B-Sand IRZ monitoring wells (IRZ-B-MW2) will be utilized as part of the Site groundwater monitoring network for the semi-annual source area monitoring event (Figure 2). This monitoring well is located within the Building 2 source area, and replaces former monitoring well TMW-05, abandoned in 2003 due to re-development activities.

Approximately 41 groundwater monitoring events have taken place at the Site since monitoring began in 1987. All of the groundwater monitoring wells were typically sampled during each groundwater monitoring event, performed quarterly until 1997. In 2000, the groundwater monitoring program was modified to two events per year, one full annual monitoring event, and one semi-annual source area monitoring event (Kennedy Jenks Consultants, 2000b).

The most recent groundwater monitoring data were collected in March 2003. The associated report (Haley & Aldrich, Inc., 2003b) describes a typical annual monitoring event for the Site:

- Twenty Site groundwater monitoring wells were gauged, purged and sampled.
- Water samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8260B.
- Quality Assurance/Quality Control samples (duplicate samples, trip blanks, and equipment blanks [one per day]) were collected and analyzed.

Results of the 2003 annual groundwater monitoring are summarized in the Annual Groundwater Monitoring Report (Haley & Aldrich, Inc., 2003b). In general, groundwater conditions with respect to elevations, flow direction, and chemical concentrations are similar to previous years. An in situ bioremediation system with 149 IRZ injection wells, 8 IRZ

bioremediation monitoring wells, and 11 new groundwater monitoring wells are to be installed at the Site by the end of 2003. Significant redevelopment activities, consisting of construction of new buildings and paved areas have also been performed during 2003. Based on the current Site conditions and re-development plans, the following sections present the proposed 2004 groundwater monitoring program.

2. PROPOSED GROUNDWATER MONITORING PROGRAM

The proposed 2004 groundwater monitoring program consists of three sampling events:

- Annual Site-wide monitoring (March 2004);
- Quarterly monitoring of 11 new monitoring wells (June 2004); and
- Semiannual source-specific and new well monitoring (September 2004).

The above events are described in Sections 2.1, 2.2, and 2.3. General monitoring considerations are described in Section 2.4. Details of the groundwater monitoring are described in Table 2, and Figures 2, 3, and 4. As stated previously, this monitoring is in addition to the WDR-specific groundwater monitoring being performed at the Site.

2.1 Annual Groundwater Monitoring

An annual monitoring event will be performed in March 2004. The routine groundwater monitoring program described in Section 2.4.2 will be performed at 32 groundwater monitoring wells, as indicated in Table 2. Depth to groundwater will be measured in 33 groundwater monitoring wells. If available, groundwater elevation data collected from the IRZ bioremediation monitoring wells will also be utilized. Groundwater samples will be collected and analyzed for VOCs by EPA Method 8260B. Dissolved oxygen (DO) and oxidation-reduction potential (ORP) parameters will also be measured in the field for wells according to Table 2. The monitoring methodology is presented below in Section 2.4.

If select wells cannot be accessed due to Site redevelopment activities, they will be scheduled for gauging and sampling either during the quarterly event in June, or the semiannual event in September. Groundwater monitoring wells installed on the Site by Montrose and ILM will be sampled through coordination with their respective environmental contractors.

2.2 Quarterly Groundwater Monitoring

The Site-Wide Groundwater Monitoring Work Plan (Haley & Aldrich, 2003a) proposed a total of 14 new groundwater monitoring wells be installed to complete the Site monitoring well network. Eleven of these 14 proposed wells will be installed by the end of 2003, and will be included in the 2004 groundwater monitoring program. The three additional proposed monitoring wells are to be installed in 2004. When these three additional monitoring wells are installed, an addendum to this 2004 Groundwater Monitoring Work Plan will be provided to add the new wells to the monitoring program. The Site-Wide work plan requires that the new wells be initially sampled following installation, and for three successive quarters. The first sampling event for these new wells will be performed in December 2003; the second

sampling event will be performed during the March 2004 annual sampling event; the third monitoring event will be performed in June 2004. The routine monitoring program described in Section 2.4.2 will be performed on the 11 new wells as indicated in Table 2. Groundwater samples will be collected and analyzed for VOCs by EPA Method 8260B. Dissolved oxygen (DO) and oxidation-reduction potential (ORP) parameters will also be measured in the field for wells according to Table 2. The monitoring methodology is presented below in Section 2.4.

2.3 Semiannual Monitoring

A semiannual monitoring event will be performed in September 2004. The routine groundwater monitoring program, described in Section 2.4.2, will be performed at a reduced number (23) of groundwater monitoring wells and will focus on the groundwater impact source areas, as indicated in Table 2. Depth to groundwater will be measured in all 34 groundwater monitoring wells listed in Table 2. The wells to be sampled in the reduced semiannual program were selected to monitor elevated source-area impacts and down-gradient conditions, and to complete the quarterly monitoring of the 11 wells installed in 2003. One of the IRZ bioremediation monitoring wells (IRZ-B-MW2) will also be sampled during this event to provide data in the Building 2 source area. Samples collected during the semiannual event will be tested for VOCs by EPA Method 8260B (Table 2). DO and ORP parameters will also be measured in the field for wells according to Table 2. The monitoring methodology is presented below in Section 2.4.

2.4 Groundwater Monitoring Methodology

2.4.1 Health and Safety

The work will be performed under a Site-specific Health and Safety Plan (HSP) in accordance with the federal Occupational Safety and Health Act (OSHA). The existing HSP for groundwater monitoring at the BRC Former C-6 Facility was prepared on 8 June 2001, and updated by addendum on 30 October 2002 and 12 November (Haley & Aldrich, Inc., 2001, 2002b, and 2002c). This HSP will be used by field staff while conducting field activities.

2.4.2 Fieldwork – Groundwater Monitoring and Sampling

BRC will notify the LARWQCB a minimum of one week prior to the start of groundwater monitoring events. The following activities will be performed:

2.4.2.1 Water Level Gauging

Prior to sampling each monitoring well, depth to groundwater will be measured in each well to the nearest one-hundredth of a foot using an electronic water level sounder. Data from the well gauging will be recorded in the Well Gauging Data Sheet (Appendix A), as well as the Boeing Data Management Plan (DMP) an electronic form for upload to the project database (Appendix B). Monitoring well vapor concentrations will be measured with a photo-ionization detector (PID) following the removal of the well cap, and results will be recorded on the Well Gauging Data Sheet. During the one quarterly monitoring event (June 2004), only the 11 new monitoring wells will be gauged. All 33 of the Site monitoring wells will be gauged during the annual and semi-annual monitoring events in March and September 2004). If concurrent water level data from the IRZ bioremediation monitoring wells are available, these data will also be utilized. The 33 groundwater monitoring wells will be gauged within a single 24-hour period with the same water sounding tape.

2.4.2.2 Well Purging and Sampling

Based on historical concentrations, groundwater monitoring wells will be sampled in order of increasing concentration. The results from the semiannual event performed in September 2003 and initial sampling of the 11 wells to be installed in 2003 will be available prior to the 2004 annual event and will be used to determine the sampling order for the March 2004 event, if necessary. The sampling order for the September 2004 semiannual sampling event will be based on the results of the March 2004 annual event and the June 2004 quarterly event as appropriate.

Following well gauging, each well will be purged by extracting a minimum of three wetted well casing volumes of standing water with a pump. The depth to water, temperature, pH, and specific conductance will be measured and recorded periodically on a Groundwater Sampling Data Sheet (Appendix A) after each one-half wetted casing volume is purged from the well. Purging will be complete when a minimum of three wetted casing volumes have been removed and three consecutive measurements of specific conductance, pH, and temperature are within 10% of each other. If parameters do not stabilize after five casing volumes, purging will be complete. Dedicated tubing will be used for each well to minimize potential sampling equipment interference.

The intake of the submersible pump will be placed at a depth as close to the static water level as possible (within 2-feet). The purge rate will not exceed 2

gallons per minute (gpm) for 4-inch diameter wells and 1 gpm for 2-inch diameter wells. The water level will be monitored during purging and the purge rate will be adjusted so that the draw-down in the well is minimized to prevent groundwater from cascading down the interior sidewalls of the well casing.

Dissolved oxygen (DO) and oxidation reduction potential (ORP) parameters will also be measured in the field in select wells as per Table 2. These parameters will be collected and recorded in accordance with the Standard Operating Procedures for Measuring Natural Attenuation Parameters (England Geosystem and Haley & Aldrich, 2001).

After well purging parameters have stabilized, the pumping rate will be decreased to less than 0.1 gpm, and groundwater samples will be collected from the pump discharge in appropriate containers. Samples will be stored on ice in a cooler and transported by courier to a California-certified analytical laboratory for analysis under proper chain-of-custody. Chain of custody forms will be maintained throughout sample collection and transport. An example of the chain of custody form is provided in Appendix A. The appropriate chain of custody information will also be electronically uploaded to the project database.

Equipment used for well purging and sampling will be cleaned prior to and between groundwater monitoring wells with an Alconox solution (or equivalent), then double-rinsed with tap water and deionized or distilled water to reduce the potential for cross-contamination. Well purge water and water used to decontaminate equipment will be stored in properly labeled, DOT 55-gallon drums and stored on-Site at a location selected by BRC. The drums will be properly manifested and disposed of by BRC following receipt of laboratory results.

Groundwater analytical results will be reported on RWQCB Laboratory Report Forms 10A/10B or their equivalent in units of milligrams per liter (mg/L) or micrograms per liter (μg/L). Field data will be collected and recorded on standard groundwater monitoring forms, in accordance with the Boeing Electronic DMP (Boeing EDMS, 2001).

The laboratory reports will be submitted electronically to the firm that will provide project data management.

2.4.3 Quality Assurance/Quality Control

2.4.3.1 Duplicate Samples

One duplicate groundwater sample will be collected for every 20 groundwater samples as a check for sample homogeneity and laboratory accuracy (2 samples in March, 1 sample each in June and September). Sample duplicates are. Duplicates will be collected, numbered, packaged, and sealed in the same manner as the other samples. Duplicates will be assigned separate sample numbers and submitted blind to the laboratory. Duplicate samples will be analyzed for VOCs by EPA Method 8260B.

2.4.3.2 Rinsate Blanks

One equipment rinsate blank sample will be collected prior to initiation of sampling activities as a check for cross-contamination during sample collection; another each day throughout the duration of the sampling event when sampling equipment is cleaned and re-used in the field (an estimated 6 samples in March, 2 samples in June, and 4 samples in September). . Deionized water will be used to fill or rinse the sampling equipment after the equipment has been cleaned, then collected in the sample containers. The equipment rinsate blanks will be analyzed for VOCs by EPA Method 8260B.

2.4.3.3 Field Blanks

One field blank will be collected each day with laboratory supplied water to check for contamination by sampling methodology (an estimated 6 samples in March, 2 samples in June, and 4 samples in September). The field blanks will be analyzed for VOCs by EPA Method 8260B.

2.4.3.4 Decontamination Water

One water sample will be collected from the water used for decontamination of the sampling equipment (an estimated 6 samples in March, 2 samples in June, and 4 samples in September). The decontamination water sample will be analyzed for VOCs by EPA Method 8260B.

2.4.3.5 Travel Blanks

One travel blank will be prepared in the laboratory for each day that groundwater samples are collected and shipped to the laboratory (an estimated 6 samples in March, 2 samples in June, and 4 samples in September). The

travel blanks will be prepared in a clean environment and kept in the cooler used to ship samples. The travel blank provides a check for cross-contamination during transport, and will be analyzed for VOCs by EPA Method 8260B.

2.4.4 Data Validation

A subcontractor (Laboratory Data Consultants, Inc. [LDC]) will perform three levels of data validation: Tier 1, Tier 2, and Tier 3 validation. The validation process will follow the U.S. Environmental Protection Agency (EPA) Contract Laboratory Program National Functional Guidelines for Organic Data Review (EPA, 1999 and 2002). Approximately 10% of the laboratory data will be reviewed during each monitoring event to ensure that the data are of sufficient quality (3 samples from the March annual event, 1 sample from the June quarterly event, and 2 samples from the September semi-annual event). The data packages to be validated will be selected randomly. Approximately 55% of the data will be subjected to Tier 1 validation, 40% will be subjected to Tier 2 validation, and 5% will be subjected to Tier 3 validation.

3. GROUNDWATER MONITORING REPORT

Groundwater monitoring reports will be prepared and submitted to contain the following:

- A groundwater elevation contour map;
- Tables and figures that depict groundwater analytical results;
- Groundwater sampling forms and field notes documenting field activities;
- Laboratory reports and chain of custody documentation;
- Appropriate descriptions of the sampling event, test results, and discussion and conclusions regarding water quality and hydrogeologic changes at the Site;
- Discussion of changes in Site/well conditions that might affect future sampling events; and
- Recommendations for modifications to the sampling program, if necessary.

Reports will be submitted to LARWQCB approximately 60 days after the completion of each sampling event. With monitoring events occurring in March, June, and September, reports will be provided to the LARWQCB in May, August, and November 2004. The reports will consist of a hard copy of text, tables, figures, and analytical data. An electronic version of the report on compact disc will also be provided with the hard copy document.

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15. United States Environmental Protection Agency (USEPA), 1999, USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, EPA-540/R-99-008, October.

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TABLES

Table I
Groundwater Monitoring Well Completion Information
Boeing Realty Corporation, Former C-6 Facility
Los Angeles, California

Name	Easting[1]	Northing[1]	Top of Casing Elevation (AMSL)[2]	Boring Total Depth (feet)	Screen Depth Interval (feet)	Depth to Top of Filter Pack (feet)	Casing Diameter (inches)	Casing Type	Slot Size	Drilled Date
WCC-3S	12608.52	13238.90	51.12	92	69-89	64	4	Sched 40 PVC	0.010-Inch	10/26/1987
WCC-4S	12741.35	13075.30	49.62	91.5	70.5-90.5	65	4	Sched 40 PVC	0.010-Inch	10/27/1987
WCC-5S	12963.90	12998.70	48.79	91	61-91	63.5	4	Sched 40 PVC	0.010-Inch	11/24/1987
WCC-6S	12580.24	12953.10	51.30	91	60-90	54	4	Sched 40 PVC	0.010-Inch	9/22/1989
WCC-7S	12730.37	12868.65	50.20	90.5	60-90	54	4	Sched 40 PVC	0.010-Inch	6/8/1989
WCC-9S	12928.87	12627.94	46.85	91.5	60-90	55	4	Sched 40 PVC	0.010-Inch	9/21/1989
WCC-12S	12749.26	12715.21	46.92	91.5	60-90	55	4	Sched 40 PVC	0.010-Inch	9/17/1990
DAC-P1	11194.86	12988.63	52.75	90	60-90	55	4	Sched 40 PVC	0.010-Inch	9/25/1989
TMW-1	12212.00	13143.49	56.46	91	66-86	64	2	Sched 40 PVC	0.010-Inch	6/28/1998
TMW-2	12478.09	13161.38	56.38	92	67-87	62	2	Sched 40 PVC	0.010-Inch	6/28/1998
TMW-4	12498.69	12334.70	48.79 [3]	84	58-78	56	2	Sched 40 PVC	0.010-Inch	6/30/1998
TMW-6	12552.93	11936.32	49.50 [3]	93	67-87	66	2	Sched 40 PVC	0.010-Inch	7/1/1998
TMW-7	12560.70	12701.25	52.52	91	65-85	63	2	Sched 40 PVC	0.010-Inch	6/29/1998
TMW-8	12571.93	12812.42	53.99	89.5	61-81	59	2	Sched 40 PVC	0.010-Inch	6/29/1998
TMW-9	12344.53	12740.05	52.75	85	60-80	58	2	Sched 40 PVC	0.010-Inch	6/30/1998
TMW-10	12968.14	12170.61	47.48	85	60.5-80.5	57.6	2	Sched 40 PVC	0.010-Inch	1/28/1999
TMW-11	12968.08	11423.04	47.41	83	58-78	54.6	2	Sched 40 PVC	0.010-Inch	2/1/1999
TMW-14	11797.06	11416.11	58.16	90	65-85	63	2	Sched 40 PVC	0.010-Inch	2/3/1999
TMW-15	11800.22	12165.10	55.23	92	62-87	60	2	Sched 40 PVC	0.010-Inch	2/4/1999
BL-3	11207.79	11961.46	56.48	79	59-79	56	2	Sched 40 PVC	0.010-Inch	2/8/1999
Montrose Wells										
XMW-09	12654.36	11148.11	53.67	-	66-81	-	4	-	-	5/9/1989
XMW-19	12968.08	11757.92	46.53	-	63-79	-	4	-	-	3/30/1990
New Wells to be installed in 2003 [4]										
MWC001	TBD	TBD	TBD	~125	~100-125	~98	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWB005	TBD	TBD	TBD	~85	~65-85	~63	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWB012	TBD	TBD	TBD	~85	~65-85	~63	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWB013	TBD	TBD	TBD	~85	~65-85	~63	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWB014	TBD	TBD	TBD	~85	~65-85	~63	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWC015	TBD	TBD	TBD	~125	~100-125	~98	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWC016	TBD	TBD	TBD	~125	~100-125	~98	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWC017	TBD	TBD	TBD	~125	~100-125	~98	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWB019	TBD	TBD	TBD	~85	~65-85	~63	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWC021	TBD	TBD	TBD	~125	~100-125	~98	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
MWC026	TBD	TBD	TBD	~125	~100-125	~98	4	Sched 40 PVC	0.010-Inch	8/03 to 12/03
IRZ-B-MW2	TBD	TBD	TBD	~85	~65-85	~63	2	Sched 40 PVC	0.010-Inch	8/03 to 12/03

Notes:
1 Local coordinate system (feet)
2 AMSL = Above Mean Sea Level - Wells were surveyed March 19, 2002 & September 13, 2002 by Tait & Associates.
3 Top of casing re-surveyed in September 2003 following alteration of wellhead.
4 Wells planned to be installed by end of 2003, data shown are proposed values.
- = not available
TBD = To Be Determined

QA/QC: PRS
Date 10/29/2003

Table II
2004 Groundwater Monitoring Work Plan - Analytical Program
Boeing Realty Corporation, Former C-6 Facility
Los Angeles, California

Name	Sampling Order (March 2004) [1]	Annual Event Analytical Program March 2004			Sampling Order (June 2004) [2]	Quarterly Event Analytical Program June 2004			Sampling Order (September 2004) [3]	Semiannual Event Analytical Program September 2004		
		Water Level Gauging	VOCs (8260B)	DO and ORP		Water Level Gauging	VOCs (8260B)	DO and ORP		Water Level Gauging	VOCs (8260B)	DO and ORP
WCC-3S		x	x							x		
WCC-4S		x	x							x		
WCC-5S		x	x							x	x	
WCC-6S		x	x							x		
WCC-7S		x								x		
WCC-9S		x	x							x		
WCC-12S		x	x							x		
DAC-P1		x	x							x	x	
TMW-01		x	x							x	x	
TMW-02		x	x							x	x	
TMW-04		x	x							x	x	
TMW-06		x	x	x						x	x	x
TMW-07		x	x							x	x	
TMW-08		x	x							x		
TMW-09		x	x							x		
TMW-10		x	x							x	x	
TMW-11		x	x	x						x	x	x
TMW-14		x	x							x	x	
TMW-15		x	x							x	x	
BL-03		x	x							x		
XMW-09		x	x	x						x		x
XMW-19		x	x	x						x		x
MWB005 [4]		x	x	x		x	x	x		x	x	x
MWB012 [4]		x	x	x		x	x	x		x	x	x
MWB013 [4]		x	x	x		x	x	x		x	x	x
MWB014 [4]		x	x	x		x	x	x		x	x	x
MWB019 [4]		x	x	x		x	x	x		x	x	x
MWC001 [4]		x	x	x		x	x	x		x	x	x
MWC015 [4]		x	x	x		x	x	x		x	x	x
MWC016 [4]		x	x	x		x	x	x		x	x	x
MWC017 [4]		x	x	x		x	x	x		x	x	x
MWC021 [4]		x	x	x		x	x	x		x	x	x
MWC026 [4]		x	x	x		x	x	x		x	x	x
IRZ-B-MW2 [4]		[5]	[5]	[5]						[5]	[5]	[5]
Quality Control Samples												
Duplicates (1 per 20 wells)			x (est. 2)				x (est. 1)				x (est. 1)	
Rinsate Blanks (1 per day)			x (est. 6)				x (est. 2)				x (est. 4)	
Field Blanks (1 per day)			x (est. 6)				x (est. 2)				x (est. 4)	
Decon Water (1 per day)			x (est. 6)				x (est. 2)				x (est. 4)	
Travel Blanks (1 per day)			x (est. 6)				x (est. 2)				x (est. 4)	

Notes:

est. = Quality control sample number estimated based on estimated number of sampling days.
DO = Dissolved Oxygen (Field Analysis)
ORP = Oxidation Reduction Potential (Field Analysis)
VOCs = Volatile organic compounds
8260B = EPA Method 8260B

QA/QC: PRS
Date: 10/29/2003

[1] Sampling order for March 2004 will be based on results of March 2003 annual and September 2003 semi-annual events, and the initial sampling event of the 11 new wells scheduled for December 2003

[2] Sampling order for une 2004 will be based on March 2004 results.

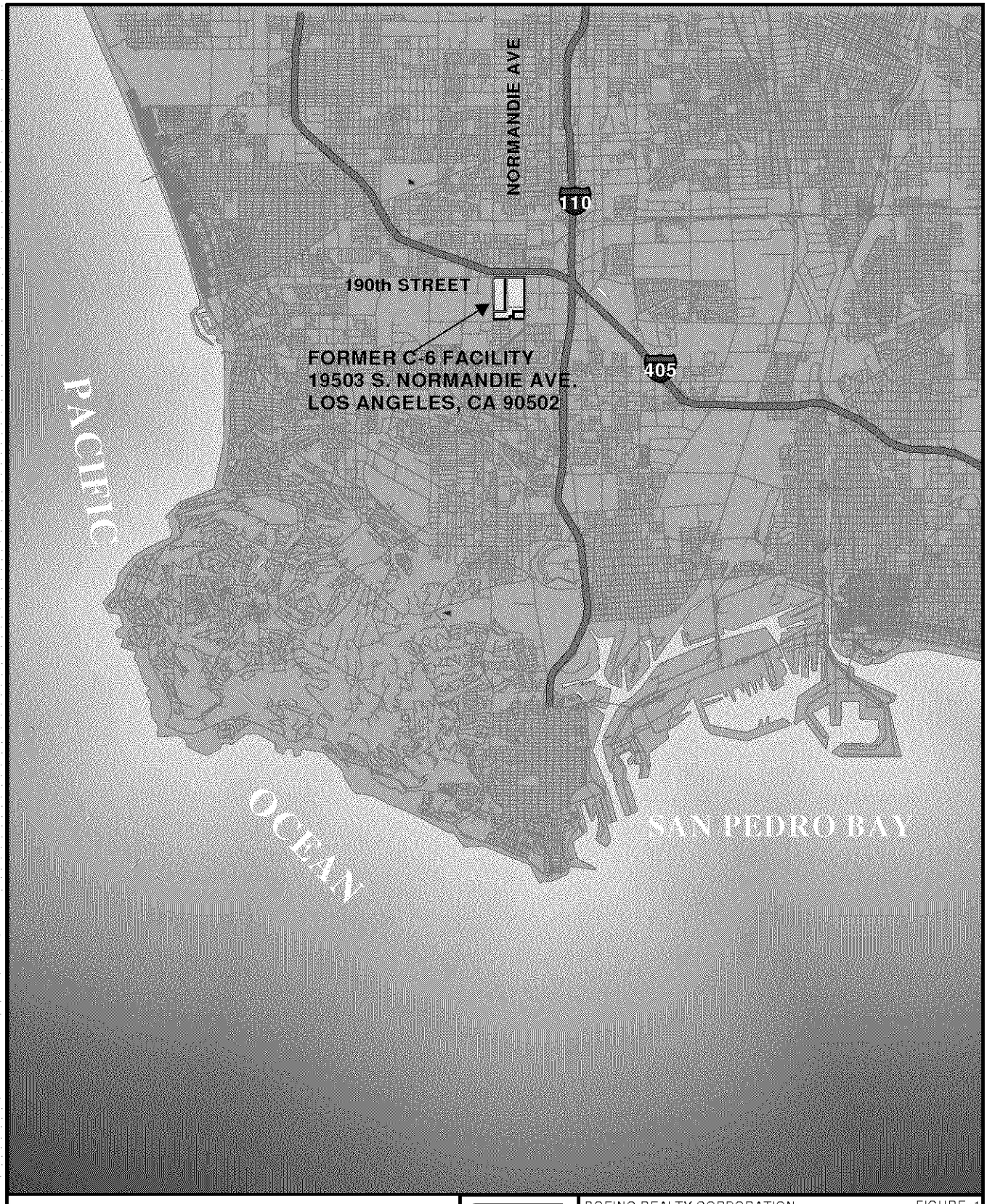
[3] Sampling order for September 2004 will be based on March and une 2004 results.

[4] New groundwater monitoring wells planned to be installed by December 2003

[5] IRZ bioremediation well data to be utilied if collected concurrently with other monitoring well data.

BOE-C6-0008520

FIGURES



N

2 1 0 2 Miles

27936-002

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UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

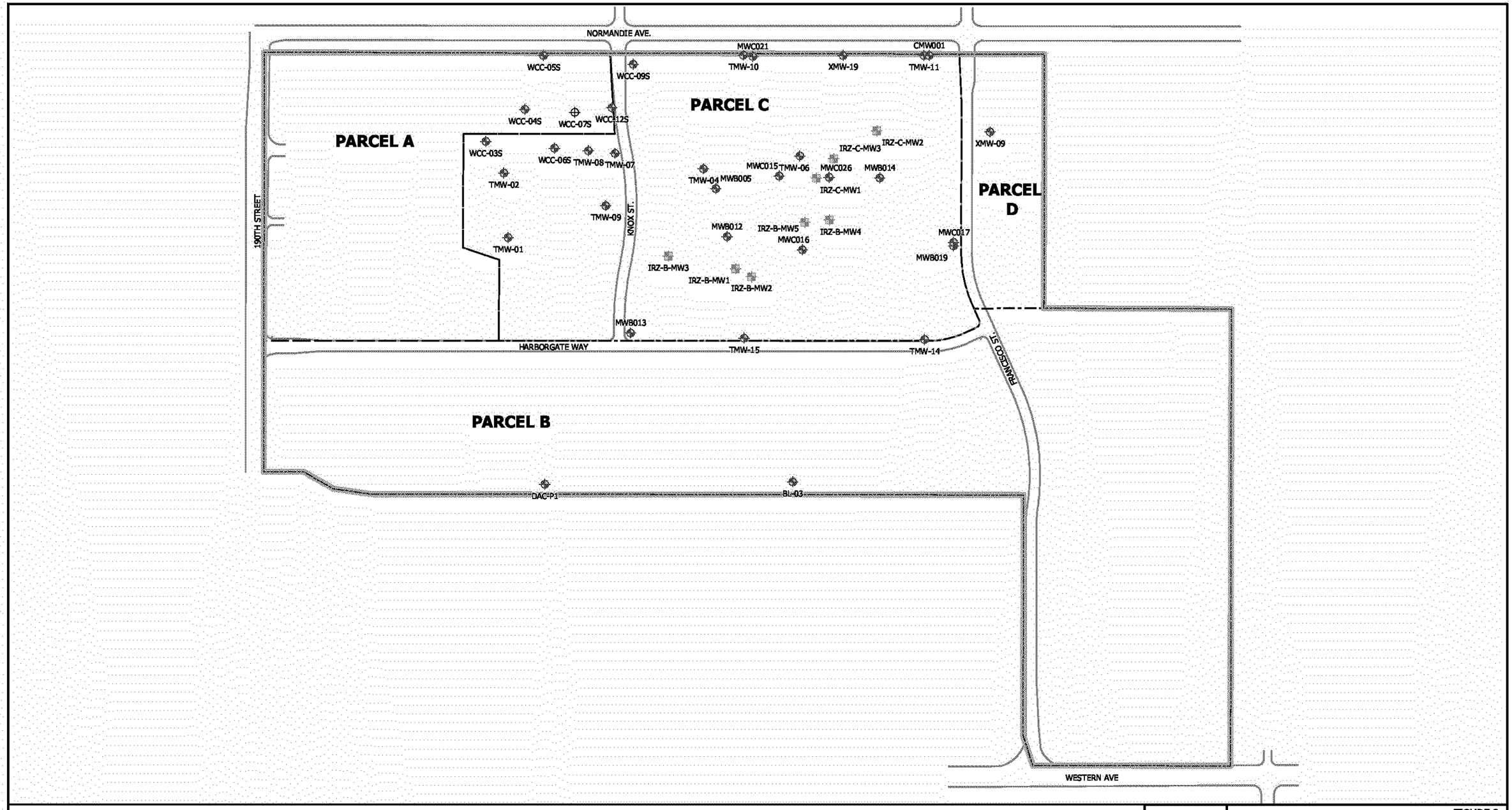
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 1

SITE LOCATION MAP

SCALE AS SHOWN

AUGUST 2002



LEGEND

- WCC-07S — Groundwater Monitoring Well not to be Sampled Annually
- TMW-1 — Groundwater Monitoring Well to be Sampled Annually
- IRZ-B-MW1 — IRZ Bioremediation Monitoring Well, Concurrent Well Data to be Used if Available
- Property Boundary
- Parcel Boundary

N

All Locations and Dimensions are Approximate

0 200 400 800 Feet

28882-002

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UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

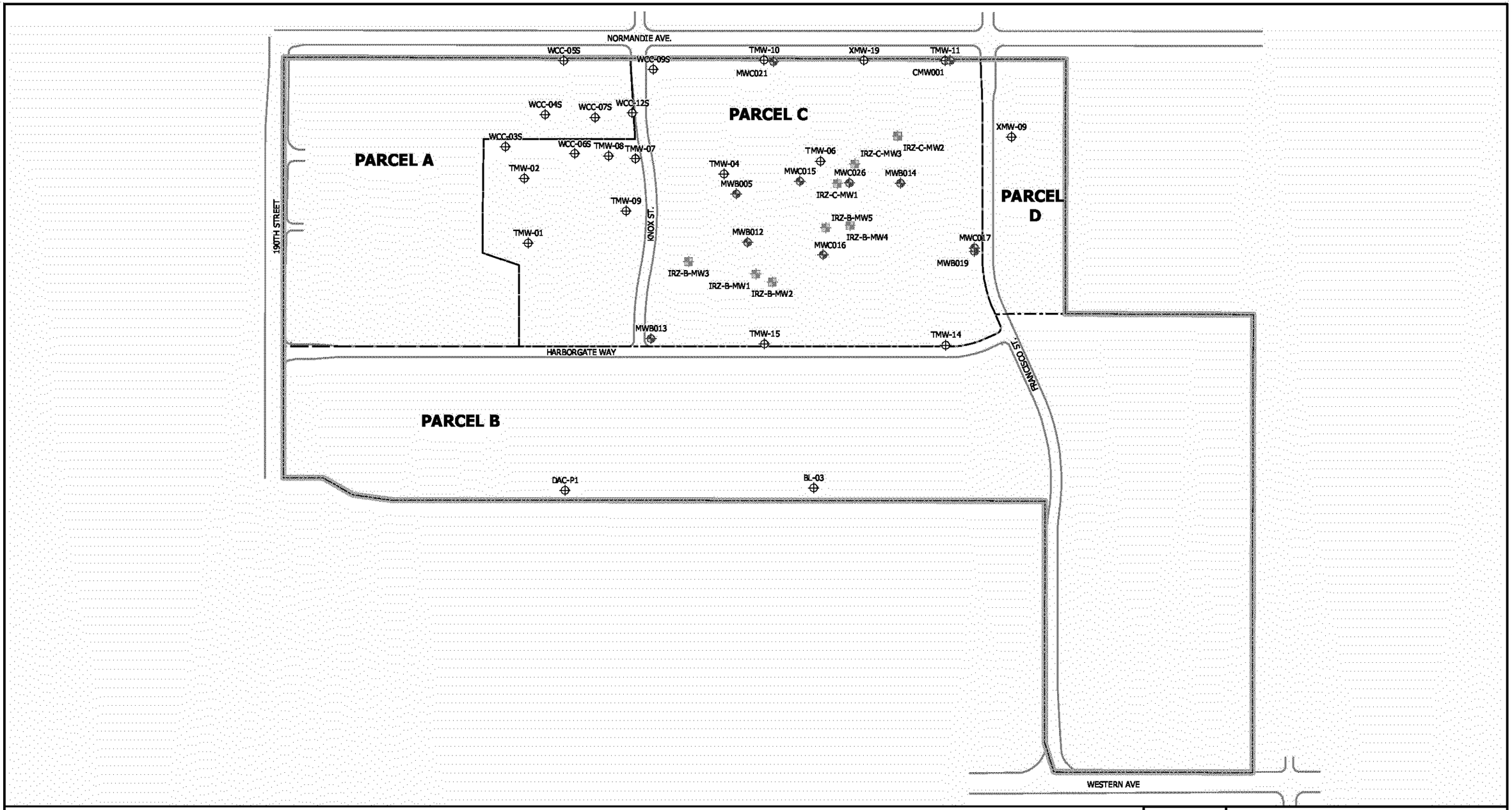
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 2

GROUNDWATER MONITORING WELLS 2004 ANNUAL SAMPLING EVENT

SCALE AS SHOWN

OCTOBER 2003



LEGEND

WCC-07S — Groundwater Monitoring Well not to be Sampled Quarterly

MWB013 — Groundwater Monitoring Well to be Sampled Quarterly

IRZ-B-MW1 — IRZ Bioremediation Monitoring Well, Concurrent Well Data to be Used if Available

Property Boundary

Parcel Boundary

N

All Locations and Dimensions are Approximate

0 200 400 800 Feet

28882-002

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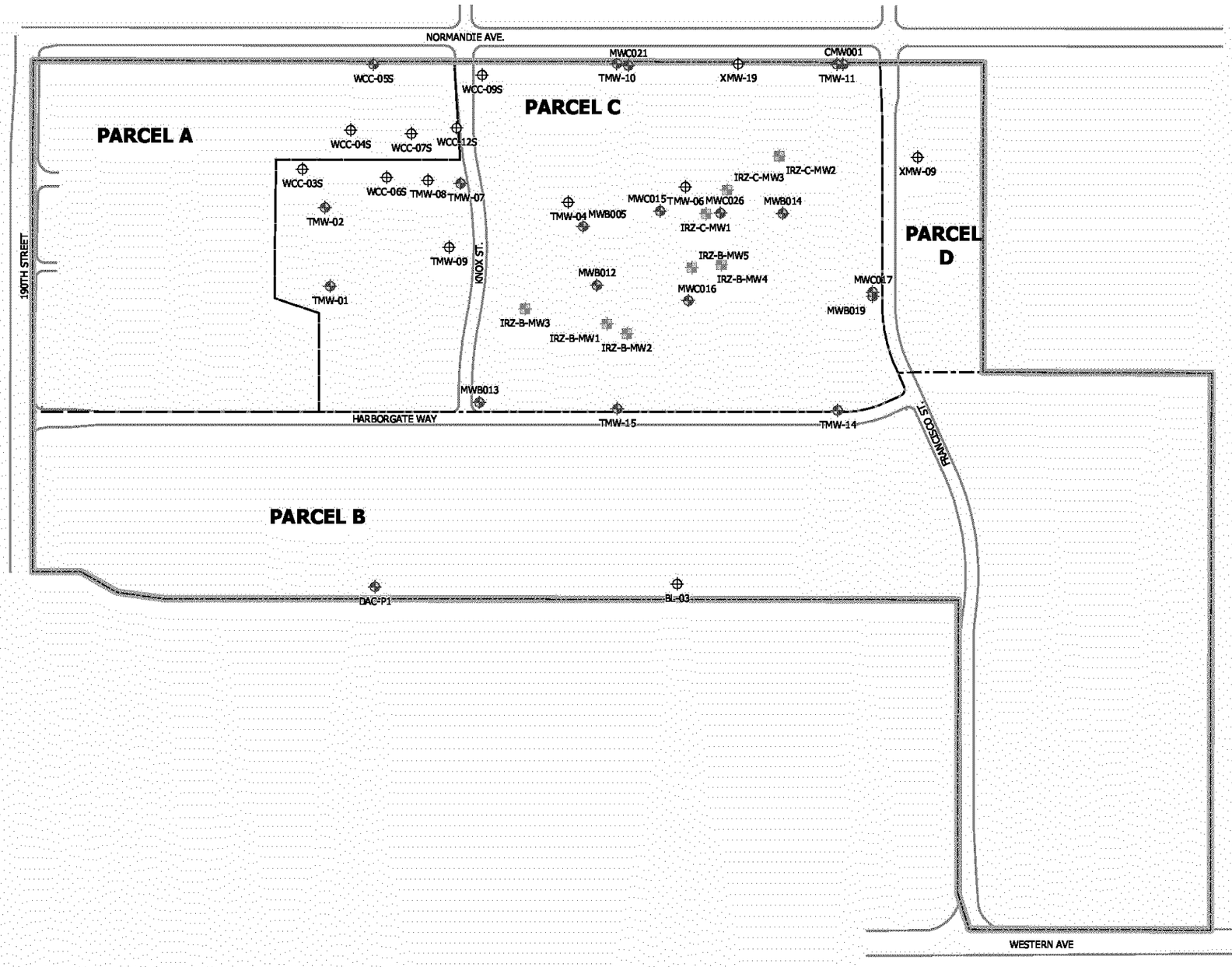
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 3

GROUNDWATER MONITORING WELLS 2004 QUARTERLY SAMPLING EVENT

SCALE AS SHOWN

OCTOBER 2003



LEGEND

WCC-07S — Groundwater Monitoring Well not to be Sampled Semiannually

TMW-1 — Groundwater Monitoring Well to be Sampled Semiannually

IRZ-B-MW1 — IRZ Bioremediation Monitoring Well Concurrent Well Data to be Used if Available

Property Boundary

Parcel Boundary

N

All Locations and Dimensions are Approximate

0 200 400 800 Feet

28882-002

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BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 4

GROUNDWATER MONITORING WELLS 2004 SEMIANNUAL SAMPLING EVENT

SCALE AS SHOWN

OCTOBER 2003

APPENDIX A

FIELD FORMS

Groundwater Sampling Data Sheet

Project Name:	**Date:**
Project No.:	**Prepared By:**
Well Identification:	**Weather:**
Measurement Point Description:	

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	One (1) Casing Volume (gallons)	Three (3) Casing Volumes (gallons)

Well Diameter (in)				Gallons/Foot				Field Equipment:
				0.75	2	4	6	Purge Method:
0.75	2	4	6	0.02	0.16	0.65	1.47	Well Condition:

Time	Casing Volumes Purged	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NT)	Conductivity (S/m)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80 Recovery Water Level Depth	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification

Notes:

ft-bmp = feet below measuring point
LNAPL = light non-aueous phase liuid
G:\Projects\ENVIRONMENTAL\28882_C6ProjectMngmt\002\2004 GW Monitoring Wkpln\Well Sampling form.doc

Well Gauging Data Sheet

Site Name: _____

Well ID	Date	Time	PID (ppm)	Diameter (in)	Measurement Point	Depth to LNAPL (ft-bmp)	Depth to Water (ft-bmp)	LNAPL Thickness (ft)	Total Depth (ft-bmp)	Personnel	Comments

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client	Project Manager	Date	Chain of Custody Number
			052300
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page _____ of _____
City / State / Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
Project Name and Location (State)	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.	Matrix / Containers & Preservatives		Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/ NaOH																

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other_____

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

APPENDIX B

DATA MANAGEMENT FORMS

3-1 Document Identification

Text(255)	Text(4)	Text(50)	Text(4)	Text(10)	Text(20)	Text(50)	Text(50)	Text(50)	Date	Text(255)
	Table B-25	Portal drop-down menu								
Document Title of Description. The title should be the same as it appears in the document cover page or regulatory agency transmittal letters.		Document Type (work plan, report, permit, drawing, photograph, memorandum, letter). Select from the drop-down menu available on the portal.	Site Map Grid Cell Reference (provided for each project). Example: G2, F6 etc.	If applicable. Environmental Impact Area (or) Subareas. Example: EIA , EIA M etc.	If applicable. Area (Site, Building, Area, etc.). Example: Building 5	Environmental Consultant Company Name.	Name of Author (Last, First, MI).	Name of Environmental Consultant Company Project Manager.	Date document was published.	List at least five keywords that adequately capture the information presented in the document.
Mandatory	Mandatory	Mandatory	Mandatory	Conditional	Conditional	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Title	Project ID	Type	GridRef	EIA	Area	ECC	Author	PM	Date	Keywords

3-3 Site Objects

Text(4)	Text(4)	Text(12)	Text(50)	Text(6)	Date/Time	Date/Time	Text(30)	Text(30)	Text(30)	Text(30)	Text(30)	Decimal(5,2)	Text(4)
Table B-25	Table B-24	Table B-26	Table B-14							Table B-6			Feet
C1, C6, etc.		AOC5, EIAM	Type of object sampled or installed (i.e., soil boring, monitoring well, vapor point, tank, stream, etc.).	ni ue identifier of object. See Table 3-5.	08/01/2001 13:45 - (use 24-hour clock)	08/01/2001 13:45 - (use 24-hour clock)						Re uired if encountered.	If water is encountered. Note: se Feet - do not shorten or change.
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Conditional	Conditional	Mandatory	Mandatory	Conditional	Conditional
Project ID	Consultant ID	Area ID	Object Type	Object Name	Date_Time Started	Date_Time Completed	Drilling Contractor	Driller Name	Drill Rig	Drilling Method	Logged By	Water Depth	Water Depth nits

3-3 Site Objects

Decimal(5,2)	Text(4)	Decimal(28,15)	Decimal(28,15)	Text(1)	Decimal(28,15)	Decimal(28,15)	Decimal(5,2)	Decimal(5,2)	Text(4)	Text(30)	Date	Text(50)	Text(50)
	Feet			E or S					Feet				
Measured value in units of Feet	Note: se Feet - do not shorten or change	In Zone 5 NAD 83 coordinate system	In Zone 5 NAD 83 coordinate system	Estimated or Surveyed	Survey X coordinates (in any surveying spec) recorded by user	Survey coordinates (in any surveying spec) recorded by user	See surveying specification	If used for groundwater elevation (measuring point elevation)	Note: se Feet - do not shorten or change.	Zone 5 NAD 83 coordinate system	Note: If not yet surveyed, enter date of estimation. The date the coordinates were estimated will remain until replaced by the date of the actual survey.	Comments related to object location (building number, e uipment name, tank name, etc.).	Survey accuracy, e uipment used, and benchmark name.
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Optional	Mandatory	Conditional	Mandatory	Mandatory	Mandatory	Optional	Mandatory
Total Depth/Height	Total D/H Units	X-Coord	Y-Coord	Survey Status	ser X	ser	Ground Elevation	Object Elevation	Elevation Units	Elevation Datum	Survey Date	Location Description	Comments

3-5 Sample Log

Text(4)	Text(4)	Text(6)	Text(21)	Text(2)	Decimal(5,2)	Decimal(5,2)	Text(4)	Text(50)	Date/Time	Text(50)	Text(2)	Text(21)
Table B-25	Table B-24			Table B-10			Feet	Table B-11			Table B-19	
C1, C6, etc.		ni ue identifier of object. From site object table.	See Table 3-6 and Figure 3-4	SO, WG, AV, WQ etc.	If groundwater or SVE well vapor sample, use depth to top of screen interval. = Base depth. Feet.	If groundwater sample or SVE well vapor , use depth to bottom of screen interval. = Top depth. Feet.	Feet.	Re uired if GW sampling.	Example: 08/01/2001 13:50 (use 24 hour clock)	For each event or sample collected from Object. Name of site, contractor, investigation.	PS, EB, TB, etc.	Re uired if sample type is FD, SP, MS, or SD. Enter sample name of the associated primary sample.
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Conditional	Mandatory	Mandatory	Mandatory	Conditional
Project ID	Consultant ID	Object Name	Sample Name	Matrix Type	Top Depth	Base Depth	Depth Units	Monitoring Freuency	Collection Date_Time	Sampling Event	Sample Type	Parent Sample Name

3-5 Sample Log

Text(50)	Text(50)	Integer	Text(6)	Text(3)	Text(20)	Date	Text(5)	Text(50)	Text(12)	Integer	Text(12)
	Refer to Table B-20		Table B-15		From COC. If none, create (See Specifications/ Examples)		Table B-28		Table B-3		Table B-3
	Can be multiple devices based on the sample analysis methods. se commas to separate between multiple sampling devices	Total container count	Code only - no spaces, commas, or other chars.	es or No.	**If COC does not have a number,** create one using the fomat: Sampler Intials date (mmddyy) increment for the day. Example: SH080101A. A indicates that this is the first COC for that sampler SH on on 8/1/2001 (the next would be B, etc.). **This number is to be written on the top right hand corner of the COC that is shipped with the samples.**	The date the samples are shipped to, picked up by, or delivered to the lab. MM/DD/ .	se lab codes provided in Table B-33		Only one analytical method in this field, as defined in Table B-3.	If the turnaround time for Analytical Method 1 is something other than the standard 10 business days. Enter in days (i.e. 24-hours is entered as 1). **If Analytical Method 1 is to be held until notified, enter 0. Leave as null for standard TAT.**	If more than one analysis. Analytical Method 1 cannot be null. Only one analytical method in this field - do not enter NA.
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory	Conditional	Conditional
Collector Name	**Sampling Device**	**Container Qty**	**Preservative Type**	**Filtered**	**COC Ref No**	**ShipDate**	**Lab Name**	Comments	**Analytical Method 1**	TAT 1	Analytical Method 2

3-5 Sample Log

Integer	Text(12)	Integer	Text(12)	Integer	Text(12)	Integer	Text(12)	Integer	Text(12)	Integer	Text(12)	Integer	Text(12)	Integer	Text(12)	Integer
	Table B-3		Table B-3		Table B-3		Table B-3		Table B-3		Table B-3		Table B-3		Table B-3	
If Analytical Method 2 is not null, and the turnaround time is something other than the standard 10 business days, enter in days (i.e., 24-hours is entered as 1). **If Analytical Method 2 is to be held until notified, enter 0. Leave as null for standard TAT.**	If more than two analyses. Above analytical methods cannot be null. Only one analytical method in this field - do not enter NA.	If Analytical Method 3 is not null and the turnaround time is something other than the standard 10 business days. Enter in days (i.e. 24-hours is entered as 1). **If Analytical Method 3 is to be held until notified, enter 0.**	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above	See instructions above
Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional
TAT 2	Analytical Method 3	TAT 3	Analytical Method 4	TAT 4	Analytical Method 5	TAT 5	Analytical Method 6	TAT 6	Analytical Method 7	TAT 7	Analytical Method 8	TAT 8	Analytical Method 9	TAT 9	Analytical Method 10	TAT 10

3-7 Field Monitoring Data

Text(4)	Text(4)	Text(6)	Date/Time	Decimal(5,2)	Decimal(5,2)	Text(4)	Text(50)	Text(50)	Text(50)	Decimal(5,2)	Text(20)	Text(50)	Text(20)	Text(50)
Table B-25	Table B-24					Feet		Table B-12	Table B-13		Table B-13			
C1, C6, etc.		ni ue identifier of object. From Site Object table.	08/01/2001 13:45 - (use 24 hour clock)	If groundwater sample, enter top of screen interval.	If groundwater sample, enter bottom of screen interval.	Feet.	As defined by Consultant s sampling plan.					Indicate reasons for re. uired measurements that are not collected / beyond QC limits.		
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Dptional	Mandatory	Dptional
Project ID	Consultant ID	Object Name	Date_Time	Top Depth	Base Depth	Depth Units	Monitoring Event	Monitoring Instrument	Monitoring Parameter	Parameter Value	Parameter Units	Remarks	Recorded By	Comments

3-12 Well Construction

Text(4)	Text(4)	Text(6)	Text(6)	Text(20)	Decimal(5,2)	Text(6)	Decimal(5,2)	Decimal(5,2)	Text(4)	Boolean(3)	Text(30)	Decimal(5,2)	Text(6)	Decimal(5,2)	Decimal(5,2)	Text(4)	Text(30)	Decimal(5,2)	Text(10)	Text(30)
Table B-25	Table B-24			Table B-4		Inches			Feet	es or No	Table B-22		Inches			Feet			Cubic Feet	Table B-21
C1, C6, etc.		ni ue identifier of object. From Site Object table.	Re uired. If applicable (if soil boring is converted into monitoring well)	Re uired for each casing interval. Feet.	Re uired for each casing interval. Inches.	Re uired for each casing interval. Inches.	Re uired for each casing interval. Feet.	Re uired for each casing interval. Feet.	Re uired for each casing interval. Feet.	Re uired for each casing interval. es or No.	Re uired for each casing interval.	Re uired for each casing interval. Inches.	Re uired for each casing interval. Inches.	Re uired for each casing interval. Feet.	Re uired for each casing interval. Feet.	Re uired for each casing interval.	Re uired for each casing interval.	Re uired for each casing interval. Cubic Feet.	Re uired for each casing interval.	Re uired for each screen interval.
Mandatory	Mandatory	Mandatory	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditiona	Conditiona	Conditional
Project ID	Consultant ID	Object Name	Soil Boring Object Name	Casing Type	Casing Diameter	Casing Diameter nit	Casing Top Depth	Casing Base Depth	Casing Depth nit	Outside Casing	Seal Type	Seal Diameter	Seal Diameter nit	Seal Top Depth	Seal Base Depth	Seal Depth nit	Seal Gradation	Seal Material Qty	Seal Qty nit	Screen Type

3-12 Well Construction

Decimal(5,2)	Text(6)	Decimal(5,2)	Decimal(5,2)	Text(4)	Decimal(5,2)	Text(6)	Text(30)	Decimal(5,2)	Text(6)	Decimal(5,2)	Decimal(5,2)	Text(4)	Text(20)	Decimal(5,2)	Text(10)	Boolean(3)	Decimal(5,2)	Text(4)	Text(50)
Inches	Inches			Feet		Inches	Table B-8		Inches			Feet			Cubic Feet	es or No		Feet	
Re uired for each screen interval. Inches.	Re uired for each screen interval.	Re uired for each screen interval. Feet.	Re uired for each screen interval. Feet.	Re uired for each screen interval.	Re uired for each screen interval. Inches.	Re uired for each screen interval.	Re uired for each screen interval.	Re uired for each screen interval. Inches.	Re uired for each screen interval.	Re uired for each screen interval. Feet.	Re uired for each screen interval. Feet.	Re uired for each screen interval.	Re uired for each screen interval.	Re uired for each screen interval. Cubic Feet.	Re uired for each screen interval.	es or No.	Report in Feet.	Feet.	
Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditional	Conditiona	Mandatory	Mandatory	Mandatory	Optional
Screen Diameter	Screen Diameter nit	Screen Top Depth	Screen Base Depth	Screen Depth nit	Screen Slot Sie	Screen Slot nit	Filterpack Type	Filterpack Diameter	Filterpack Diameter nit	Filterpack Top Depth	Filterpack Base Depth	Filterpack Depth nit	Filterpack Gradation	Filterpack Material Qty	Filterpack Qty nit	Outside Seal	Water Depth	Water Depth Units	Comments

BOE-C6-0008539